

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: Nevada Department of Corrections
P.O. Box 7011
Carson City, NV 89702

Permit Number: NEV90029

Location: Silver Springs Conservation Camp
4950 Shirlee Avenue
Silver Springs, Nevada 89429 (Lyon County)
Latitude: 39° 22' 36"N, Longitude: 119° 18' 17"W
(Latitude/Longitude at approximate center of Camp)
Township 18N, Range 24E, Section 33

General: The Nevada Department of Corrections operates the Silver Springs Conservation Camp (SSCC), located approximately five miles southwest of Silver Springs and one-half mile south of U.S. Hwy. 50. SSCC is a minimum-security women's conservation camp with a design capacity of 112 inmates. SSCC was constructed in 1991. The camp operates a battery septic tank system (20,000 gallons total capacity; five tanks @ 4,000 gallons each) for the treatment of domestic wastewater. Two grease interceptors (1 @ 4,000 gallons; 1 @ 250 gallons) collect kitchen waste prior to discharge to the septic tank system. Septic tanks provide primary treatment of domestic wastewater, e.g., solids removal with accompanying anaerobic sludge digestion. Septic tank effluent is discharged to a primary dosing tank, which then distributes the flow to two secondary dosing tanks. The total effluent disposal system is comprised of four individual leachfields, each containing five 100-foot long trenches.

Receiving Water Characteristics: The receiving water for septic tank effluent is groundwater of the State via leachfield percolation. A downgradient-monitoring well has been installed 240 feet north of the leachfields to a total depth of 347 feet below grade surface (bgs). The monitoring well had been screened in the uppermost portion of the supply aquifer, but the groundwater level in this aquifer has lowered since the well's installation in 1991. The monitoring well has been reported dry since 1996. Quarterly groundwater monitoring is required, if and when groundwater rises to a level that it once again enters the monitoring well. If monitoring well remains "dry", so state in the quarterly reports. The camp's potable water well is located approximately 1,800 feet northwest of the leachfields. This well is installed to a total depth of 520 feet bgs, and the lower screened interval reaches 500 feet bgs.

Flow: The Division has established a maximum 30-day average and daily maximum flow limit of 0.02 MGD (20,000 gallons per day). Effluent flow was not metered between 1999 and October 2005 due to a missing or inoperative flowmeter. A new effluent flowmeter was installed in March 2001, however the new meter malfunctioned until October 2005. Flow between October 2005 and June 2006 averaged 0.017 MGD with two exceedences (October 2005, 0.025 MGD; November 2005, 0.028 MGD).

Discharge characteristics and other monitored parameters are as follows:

Flow: 0.017 MGD¹
 CBOD₅: 148 mg/L²
 TSS: 30.25 mg/L²
 Sludge + Scum Depth: 20 inches²
 Septic Tank Liquid Depth: 30 inches²
 Leachfield Piezometer Depth: 13.25 inches²

¹: October 2005-June 2006

²: October 2004-June 2006

Proposed Effluent Limitations and Special Conditions:

Table 1: Plant Discharge Limitations

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (Effluent), MGD	0.020	0.020	Continuous	Effluent Flow Meter
CBOD, mg/L (Effluent)	Monitor & Report		Twice/Year (Apr./Oct.)	Discrete
TSS, mg/L (Effluent)	Monitor & Report		Twice/Year (Apr./Oct.)	Discrete
Sludge + Scum Depth, feet or inches (Each tank inlet) ¹	Monitor & Report		Twice/Year (Apr./Oct.)	Discrete
Liquid Level Depth, feet or inches (Each tank inlet) ¹	Monitor & Report		Twice/Year (Apr./Oct.)	Discrete

¹: The tanks shall be pumped by a licensed septage hauler whenever the combined sludge and scum depth exceeds 50% of the liquid depth, or more frequently as necessary to preserve leachfield integrity through effective solids removal in the septic tanks. See septic tank monitoring requirements specified in Part I.A.12 of permit.

Table 2: Groundwater Monitoring (MW-1 240 feet north of Leachfields)

PARAMETER	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS	
		Measurement Frequency	Sample Type
TDS, mg/L	Monitor & Report	Quarterly	Discrete
Chlorides, mg/L	Monitor & Report	Quarterly	Discrete
Nitrate as N, mg/L	Monitor & Report	Quarterly	Discrete

Total Nitrogen as N, mg/L	10.0 mg/L	Quarterly	Discrete
Depth to Groundwater ¹ (ft)	Monitor & Report	Quarterly	Field Measurement
Leachfield Piezometers #1-4 (Effluent Depth, ft or in) ²	Monitor & Report	Quarterly	Field Measurement

¹: If monitoring well is dry, state so in the quarterly DMR

²: If Piezometers are dry, state so in the quarterly DMR

Schedule of Compliance: The Permittee shall submit the following items to the Division for review and approval:

- Within ninety (90) days of the permit issuance date (**April 16, 2007**), the Permittee shall submit a revised Operations and Maintenance (O&M) Manual for the septic tank system and leachfield disposal facilities. The O&M Manual shall discuss procedures for groundwater monitoring and the inspection/pumping requirements for all septic tanks, dosing tanks, and grease trap interceptors at the facility.

Rationale for Permit Requirements: The Division's rationale for the proposed monitoring conditions is as follows:

- *Septic Tank Monitoring:* The permit requires semi-annual monitoring of the sludge + scum, and liquid level depths in the septic tank system. Presently, scum and sludge are pumped annually. High Total Suspended Solids (TSS) and Carbonaceous Biochemical Oxygen Demand (CBOD) levels in the effluent will be an indication of sludge and scum carryover to the leachfields. The permit conditions also require inspection and cleaning of the dosing tanks and grease trap interceptors to occur along with the septic tank inspections.
- *Flow:* Flow is measured to ensure that the 0.02 MGD design capacity of the septic tank treatment system is not exceeded.
- *Groundwater Monitoring:* The groundwater limit for Total Nitrogen as N (TN) is 10.0 mg/L. The Division has applied standard groundwater discharge permit language requiring the Permittee to provide an alternative method of effluent disposal if monitoring well TN levels were to reach 7.0 mg/L.

Procedures for Public Comment: The Notice of the Division's intent to issue (renew) a permit authorizing the facility to discharge septic tank effluent into the groundwater via leachfield percolation, subject to the conditions contained within the permit is being sent to the **Fernley Leader-Dayton Courier** and the **Nevada Appeal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. The deadline date at the Division for receipt of all comments pertaining to this public notice period is **5:00 PM on January 12, 2007**.

A public hearing on the proposed determination can be requested by the applicant, any affected State agency, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination: The Division has made the tentative determination to issue (renew) the proposed groundwater discharge permit for a period of five (5) years.

Prepared by: James T. Hogan
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December 2006

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